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THE GAMBIA.

ANNUAL REPORT OF THE DEPARTMENT OF AGRICULTURE FOR THE YEAR ENDING 31ST MAY, 1946.

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ANNUAL REPORT OF THE DEPARTMENT OF AGRICULTURE FOR THE YEAR ENDING 31ST MAY, 1946.

Although hostilities have ceased this report is presented in its abridged, war-time form.

SECTION I.

AGRICULTURE IN THE COLONY AND PROTECTORATE.

METEOROLOGY.

1. Weather.—The rains in 1945 were considerably below average but were well distributed. They ended abruptly early in October which caused some trouble to farmers in harvesting their groundnuts. In some places short droughts at the beginning of the planting season necessitated replanting.

Rainfall.

	1945.	Previous.	No. of years.
Cape St. Mary	33.67	45.05	10
Yoroberi-kunda	31.04	38.99	11
Wuli	38.60	43.96	16
Kerewan	40.51	44.13	10
Bwiam	41.32	1st year of recording	

2. New rain gauges have been installed at Kuntaur, Brikama and Jenoi.

Food Crops.

3. General.—The hungry season was non-existent except in Upper River Division where local foodstuffs had to be augmented by some 400 tons of imported grain and flour.

4. Dry Grains.—Some difficulty was encountered in establishing the crops owing to intermittent rainfall. Maize, early millet and guineacorn (suno and kinto) yielded well but the late maturing millet and guineacorn

(sanyo and basso) were, in some cases, affected by the sudden cessation of the rains. The Jola people of the Foni Districts of South Bank Division were the chief sufferers as their late grain was in many cases planted late and accordingly failed to head, while it is not their practice to cultivate early grains.

5. Rice in rain fed swamps was adversely affected by the light rainfall and yields were depressed. In the middle river, where the growers depend on the annual flooding of the main river to water their rice, and in the mangrove swamps, which are flooded at each tide, the yields were good.

6. On the whole it can be said that the harvest was good but, in spite of this, very little grain has been offered for sale in the Protectorate.

7. Vegetable production in the protectorate showed a falling off. The reason given was, that with the large decrease in service personnel, the growers were afraid that they would not get a market for their produce. This was an idle fear since the demand in Bathurst always exceeds the supply.

8. For years we have been recommending the growing of maize and cassava, the former as an early bite and the latter as a useful stand by. It is gratifying to be able to report that both these crops are on the increase.

Export Crops.

9. The groundnut crop, on area alone, was estimated at between 50,000 and 60,000 tons during the rains, this estimate being reduced to 47,000 tons in October. The actual export crop of 41,000 tons is therefore somewhat of a disappointment to everyone concerned.

10. The reasons for the short fall are:—

(*a*) Early cessation of the rains. This in itself did not effect the yield of nuts except in very rare cases, but by harvest time the ground was baked hard and the raising of the nuts was difficult. A lot of nuts (as much as 10%) are left in the ground and these are gleaned by the women and children for food and never find their way into the export market.

(*b*) The neighbouring French colonies had a better supply of cloth than they have had for some years and the price offered was higher than in the Gambia so that not many nuts were brought over the border for sale.

(*c*) When it was discovered that the influx of strange farmers was greater than had been expected, there was an urgent demand for seed in June and July. By this time all the good nuts had been shipped and all that was available was some 145 tons of inferior nuts held over at Kaur. These were distributed but they were badly infested by Brucid beetle and their germination percentage was very low.

11. The price, fixed by the West African Produce Control Board in conjunction with the Ministry of food remianed at £12 throughout the season.

12. The quality of the nuts this year was excellent which makes up somewhat for lack of quantity. While the farmers were waiting for a shower of rain to help them in the lifting, the nuts ripened well so that the percentage of immature and mouldy nuts was very low indeed.

13. In order to avoid the lack of seed mentioned in 10 (c) above 200 tons of seeds from the best producing area were reserved in February. This was later increased to 300 tons.

14. Palm Kernels.—The price remained at £10 10 0 per ton in Bathurst which allowed kernels to be bought at 2/6 a bushel in the Protectorate. 1,034 tons were exported in 1945 valued at £12,648.

Pests and Diseases.

15. Brucid Beetle, Caryedon fuscus (Goeze), which has been known in the Gambia in canteen stores for some years has now spread to village seed-nut stores in certain areas. The spread of infestation can be minimised by packing the seed in dry sand or ashes and the Department has advocated this control in propaganda.

At the Chiefs' Conference at Basse in January—February a model store was erected and the packing of nuts with layers of sand was demonstrated.

16. No other pests or diseases assumed any importance.

SECTION II.

WORK OF THE DEPARTMENT OF AGRICULTURE.

17. During the year a joint Agricultural Department with Sierra Leone has been inaugurated and Mr. R. R. Glanville, Director of Agriculture, Sierra Leone and Agricultural Adviser to the Gambia has paid us two visits.

18. On his first visit he was concerned with seeing as much of the work of the Department as possible and, in spite of transport difficulties in August, visits were made to Berending, Bulok and Yoroberikunda. On his second visit he was concerned with selecting the site of the new Rice Station.

19. The policy of the Department has been restated and though the framework has not been altered emphasis has been laid on certain points.

Food Production.

20. With the arrival in November 1945 of a third Agricultural Officer, a start was made on the Rice Station. The site chosen was at Jenoi in Western Jarra District of the South Bank Division and the area has been surveyed by the Lands and Survey Department. The border of the farm is the line of the approved new North/South Road, Farafeni—Balingho—Jenoi —Fonkoi in Cassamance. Drains and bunds are in the course of construction and quarters are being built for the staff. It is impossible to clear the mangrove in time for rice growing this year but a certain amount will be grown in the grass swamp behind the mangrove belt.

21. 200 bags of rice seed were imported from Sierra Leone, 100 each of Lead and Guiana Creole, and these were widely distributed throughout the Protectorate.

22. Minor works in the form of a bridge at Katchang and a causeway at Jenoi promise to bring more land under rice cultivation.

23. 158 lbs. Vegetable seeds were imported during the period under review and were sold or, in some cases, distributed free. One order unfortunately went astray in transit and some of the seed was late in arriving.

24. Seed production increased at our gardens at Cape St. Mary, Berending, Bulok and Yoroberi-kunda and it was due to this local production that we were able to tide over the awkward delay of the imported seed. Mention must be made of carrot seed referred to in my last report. The seed germinated well and seeded freely. The carrots are not a good shape and have a curious purple colour which disappears on cooking, but it is most unusual to find a carrot which seeds freely at low altitudes in the tropics. Seed from this carrot, which is known as " Cape St. Mary ", are being sent to Sierra Leone for further investigation.

25. 1,454 Fruit trees and 1,076 ornamental shrubs and trees were distributed during the rains of 1945.

26. Apiaries have been established at Brikama, Bulok and Yoroberi-kunda and honey from these has been put on sale to the public through the Controller of Supplies.

27. Experiments on Groundnuts, Millet and Guineacorn were carried out at Yoroberi-kunda Experimental farm and are briefly tabulated below.

(*a*) *Guineacorn.* Nyaro gave a significantly greater yield than Budayo and Kinto.

(*b*) *Groundnuts.* Basse gave a significantly greater yield than Sir Charles.

(*c*) *Millet and Guineacorn.* Marjo and Kinto no significant difference.

(*d*) *Groundnuts.* Sir Charles planted at 2′ x 9″ on ridges versus 1′ x 9″ on the flat showed no significant increase but on the ridge planting the seed rate was half the flat planting.

(*e*) *Guineacorn.* Basso gave a significantly greater yield than Sufenyo and Bassinding.

(*f*) *Groundnuts* subjected to one weeding only showed a significant decrease in yield, when compared with clean weeded nuts.

28. Twelve varieties of rice were grown on the riverside flats at Sankuli-kunda. Yields per acre were:—

Guiana Creole	755 lbs.	G.E.B. 24	1.063 lbs.
Yoroberi-kunda	512 ,,	N 18	608 ,,
Hill Paddy	321 ,,	D'Jougoutes	572 ,,
Bali	999 ,,	Kav	705 ,,
Blue Stick	741 ,,	Lead	1,062 ,,
N5	654 ,,	D.C.B.G.	413 ,,

Alkama wheat was grown on this land during the dry season and the best plot yielded over 1,000 lbs. per acre.

MAINTENANCE OF FERTILITY AND ANIMAL HUSBANDRY.

29. Mixed Farming.—Mixed farming has not been a success in the Gambia, mainly due to sickness among the cattle. A high percentage are infected with trypanosomiasis (T. Congolense) and although the disease is for the most part dormant any sickness or overstrain immediately brings it out.

We have been demonstrating mixed farming for several years at a great many places throughout the protectorate but the response has been practically nil.

30. With the return of the 1st Battalion from Burma, Government decided, on the suggestion of the Receiver General, to devote the sum of £1,500 to settling a certain number of these men on the land. It was felt that here was a potential for progress. The men who were known to be keen on returning to farming were picked by their Company Officers and were interviewed by the Senior Agricultural Officer and the Civil Demobilisation Officer at their camp prior to demobilisation.

31. Many of the men had brought a cheap plough back with them from India and many others, having seen the use made of cattle there, decided to practice mixed farming.

32. Accordingly, cattle purchasing and training was started at several centres and the men visited these centres for instruction. A European Officer, who has had much experience with cattle, has been put in charge of the scheme.

Itinerant 'cattlemen instructors' visit the men on their farms and continue the training started at the cattle centres.

33. If, in the opinion of this Department, their Commissioner and District Head, these men have been a success and an example to others, the scheme provides for further help from Government.

34. Piggeries.—The small piggery at Fajara has had a fairly successful year but the stock is becoming effete through interbreeding since they are all the decendants of one boar and twenty gilts imported in 1942.

35. Since the inception 105 boars and gilts have been sold to local pig owners and the result of crossing these with the local pig has been excellent.

36. The experiment can be deemed to have been a success in achieving its object of improving the local strain and the remaining thirteen pigs will be sold as soon as they are ready. A small nucleus will be retained at Yoroberi-kunda where they are cheaply maintained owing to the supply of skim milk.

37. Dairying Industry.— 3,067 lbs, of butter were produced during the period under review compared with 1,200 lbs. in the previous year. Owing to the difficulty of obtaining supplies we are still operating with some locally produced equipment including a home made churn.

38. Two unfortunate incidents occurred during the year which hindered production, the refrigerator on the river steamer failed in October resulting in the loss of 247 lbs. and the Medical Officer of Health visited the dairy in March and condemned the butter as unfit for human consumption. 240 lbs. were seized and destroyed and butter production ceased.

It took some time to get pasteurising equipment together and in April only 28½ lbs, of butter were produced from milk from the farm herd. It is greatly to the credit of the officers concerned that when buying from outside herdsmen was resumed in May together with pasteurisation of all cream, the production mounted to 290½ lbs. in that month.

39. Livestock Show.—The first livestock show in the Gambia was held at Basse on 2nd February 1946, on the occasion of the third conference of Protectorate Chiefs. There were 17 classes, 93 exhibitors and 121 exhibits.

40. Donkeys.—Four animals, three female and one male, have been purchased for observation purposes.

41. Mechanical Cultivation.—This is not an innovation in the Gambia since a Fordson Tractor, a two furrow plough and two types of harrows were purchased in 1925. Tractors in those days were fitted with steel rimmed wheels with detachable ' spuds ' and it was found that " the soil was too loose to offer sufficient resistance to the tractor wheels when the plough was used " (Annual Report 1925). Eventually the tractor broke down in 1927 and the experiment was discontinued.

42. The Gambia has a large potential reserve of fertility in the riparine grass and sedge swamps in the Middle River and it is thought that here, mechanical cultivation might be more successful.

43. In order to test this out without undue expense, the old implements were unearthed and repaired and a second hand tractor was purchased from the Air Ministry Directorate of Works. Preliminary tests show that the modern tractor fitted with pneumatic tyres has no difficulty in getting a grip even in the most sandy soil and it is hoped to test it in the swamps in the coming wet season.

Export Crops and Produce Inspection.

44. Groundnuts.—The nuts this year were of excellent quality and very free from immature and mouldy kernels. There were some groundnut haulms and sticks but these were kept down by daily hand picking the heaps in the buyers seccos.

There was a good deal of sand in some of the samples owing to the practice of tilting the rotary screens at considerably more than the prescribed angle in order to pass the nuts through quickly. This tendency will be checked next season.

45. Produce Advisory Committee.—This committee, recommended in Development and Welfare in the Gambia Chapter 8 Paragraph 20 Page 13, has been appointed and held its first meeting on 25th March, 1946. The committee consists of the Senior Agricultural Officer (Chairman) the Senior Commissioner, the Controller of Supplies, the Secretary of the Group Firms, a representative from each of the established trading firms, Chief Tamba Jarmeh of Upper Baddibu and the Secretary of the Gambia Horticultural Society.

Agricultural Education.

46. During the year there have been ten pupils at the Vocational Training School at Yoroberi-kunda. Two have passed their final examination and have been promoted to Agricultural Instructors, one resigned and three have been dismissed. It was found that their elementary education was of such a low standard that the course was not benefiting them and that they had no hope of passing the examinations. Two of these men have been given alternative employment.

47. Dry Season Produce Shows.—Five shows were held in the Protectorate as listed below. The classes consist of vegetables, fruit, prepared foodstuffs and arts and crafts. Under the last head, prizes are offered for locally made cloth, metalware, woodwork, leather goods, furniture and toys.

Date.	Place.	Classes.	Exhibits.	Prize Money.
7/3/46	Kristi-kunda	22	121	£3 4 0
12/3/46	Bakalari	25	303	6 5 0
14/3/46	Salikeni	24	451	5 14 0
30/3/46	Georgetown	29	53	5 18 0
24/4/46	Brikama	25	243	5 12 0

48. Staff.—Mr. J. Gordon. Agricultural Officer, proceeded on leave in July 1945 prior to the termination of his secondment and his return to the Gold Coast. Mr. T. F. Blood, seconded from the Produce Inspection Branch of the Nigerian Agricultural Department, arrived in August 1945. Mr. R. A. Kitching, has been posted to the Gambia from British Honduras as an Agricultural Officer. He arrived in the Colony in November 1945.

49. The European staff of the Department on the 31st May consisted of.—

Mr. J. H. Palmer—Senior Agricultural Officer
,, T. J. Stevens—Agricultural Officer
,, R. A. Kitching— ,, ,,
,, T. F. Blood— ,, ,,

Mr. Kitching assumed the duties of Rice Officer so that two vacancies remain to be filled.

SECTION III.

Omitted.

SECTION IV.

50. Legislation.—None directly affecting agriculture was effected during the period under review.

J. H. PALMER,
Senior Agricultural Officer.